

LEGEND

EXISTING TREELINE _^^^^^^^^^^^ PROPOSED TREELINE PROPOSED LIMITS OF DISTURBANCE PROPOSED TREE PROTECTION FENCE PROPOSED ROOT PRUNING TRENCH 0 PROPOSED MAJOR DECIDUOUS TREE PROPOPSED MINOR DECIDUOUS TREE PROPOSED EVERGREEN TREE PROPOSED SHRUB



NOVEMBER, 2010

PROPOSED BIORETENTION FACILITY

(20,509 S.F. OR .47 ACRES)

FOREST RETENTION AREA - LOW PRIORITY

SITE DATA / NOTES

1. DEVELOPER: WALMART REAL ESTATE BUSINESS TRUST 2001 SOUTHEAST 10TH STREET BENTONVILLE, AR 72716-0550 2. OWNER: **EVERGREEN BUSINESS TRUST** 2231 CONOWINGO ROAD BEL AIR, MD 21015 3. PREPARED BY BOWMAN CONSULTING GROUP, LTD. 14020 THUNDERBOLT PLACE CHANTILLY, VA 20151 4. SITE DATA: TAX MAP #: PARCEL #: 60 TRACT A 60 TRACT B DEED REFERENCE: 07265/00121 5. EXISTING ZONING:

6. SITE/TRACT AREA: 7. BOUNDARY SURVEY PREPARED BY BOWMAN CONSULTING GROUP, LTD,

8. TOPOGRAPHIC SURVEY PREPARTED BY BOWMAN CONSULTING GROUP, LTD, NOVEMBER, 2010

9. THERE IS AN EXISTING WATER AND OVERHEAD UTILITY EASEMENT LOCATED ON THE PROPERTY ALONG PLUMTREE ROAD.

10. THE PROPERTY IS NOT LOCATED WITHIN A NATURAL RESOURCE DISTRICT. 11. THE PROPERTY NOT LOCATED WITHIN THE HARFORD COUNTY CHESAPEAKE

BAY CRITICAL AREA OVERLAY DISTRICT. 12. THERE ARE NO KNOWN PERENNIAL OR INTERMITTENT STREAMS OR ASSOCIATED BUFFERS ON THE PROPERTY.

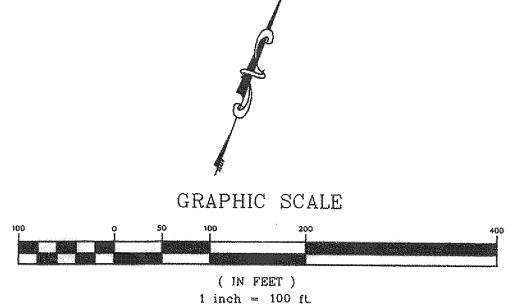
13. THERE IS NO KNOWN 100-YEAR FLOODPLAIN OR ASSOCIATED BUFFERS ON THE PROPERTY.

14. THERE ARE NO KNOWN JURISDICTIONAL NONTIDAL WETLANDS OR ASSOCIATED BUFFERS ON THE PROPERTY.

15. BASED ON MARYLAND'S ENVIRONMENTAL RESOURCES & LAND INFORMATION NETWORK (MERLIN), THE SUBJECT PROPERTY IS NOT LOCATED WITHIN A CRITICAL AREA. THERE WERE NO SENSITIVE HABITATS OR OCCURRENCES OF RARE, THREATENED OR ENDANGERED SPECIES OBSERVED ON OR IN THE VICINITY OF THE PROPERTY.

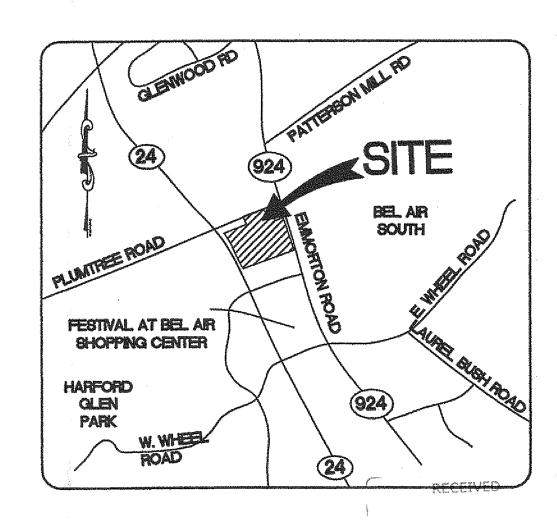
16. THERE ARE NO KNOWN NATIONAL, STATE AND/OR COUNTY CHAMPION TREES ON THE PROPERTY.

17. THERE ARE NO KNOWN HISTORICAL AREAS PRESENT ON THE PROPERTY.



VICINITY MAP

NOT TO SCALE



SEY 14 2012

24.816 ac.

6.204 ac. 14.732 ac.

0.000 ac.

14.732 ac.

14.732 ac.

0.000 ac.

WORKSHEET

Harford County, Dept. of Planning

	Name of the second seco	
Business Use	A Company of the Comp	The state of the s
Buff Buff Services Commonwealth		And the first term of the contract of the cont
Gross Acreage of Parcel	The second secon	33.720 a
orona rona ge on rancer	the first of the transfer of the second of t	23.14.00
Unforested 100-year Floodplain		
Agricultural Land to Remain	and the second	
Chesapeake Bay Critical Area		
Exempted Electric Public Utility R/V	V	
Exempted Underground Public Utility	A LAAA	0.050 a
Other		2.110 8
Net Tract Area	and the second s	31.560 a
	and the second s)
Existing Forest	titier in the control of the control	29.550 a
e grange som en skipe og flem en gran skipe skipe og en skipe skipe skipe skipe skipe skipe skipe skipe skipe		The form of the contract of th
Afforestation Threshold	15%	4.734 6
Conservation Threshold	15%	4.734 8
	to the conference of the confe	
Required Afforestation	and the first the second secon	Not Require
Soldialisto	200g.	
Break Even Point		
Maximum Forest To Clea	19.853 a	
Minimum Forest To Rem	ain, Resulting in 0.0 Reforestation	9.697 a
Proposed Clearing	the state of the s	29.080 a
e de la companya del la companya de	the same of the state were the court of the same and the same and the court of the same and the	
Forest To Remain	the state of the s	0.470 a
		month to \$1.00 appears a comment of the action of
Reforestation Requirement	A service of the serv	to a many transport of the contract con
Forest Removed Below F	A APPENDANCE FOR MANUFACTURE OF A PROPERTY OF A STATE OF THE PROPERTY OF THE P	4.264 a
2:1 Reforestation Require	to the contract and a table to be a see a second of the contract of the contra	8.528 a
Cavant Dawn and About Ci	C Thomas hald	

REFORESTATION/ LANDSCAPING REPORT:

Forest Removed Above FC Threshold

1/4:1 Reforestation Requirement

Net Reforestation Required

Total Planting Required

PER THE FOREST CONSERVATION WORKSHEET, 29.55 ACRES OF FORESTED NET TRACT AREA WILL REQUIRE 14.732 ACRES (15%) OF REFORESTATION TO SATISFY HARFORD COUNTY FOREST CONSERVATION REQUIREMENTS.

PER TABLE 4.14.1 IN THE HARFORD COUNTY FOREST COVER CONSERVATION AND REPLACEMENT MANUAL, A MAXIMUM OF 20% (2.95 ACRES) OF THE TOTAL FOREST CONSERVATION REQUIREMENT CAN BE SATISFIED BY INDIVIDUAL TREE PLANTING FOR A BUSINESS USE SITE BETWEEN 20-50 ACRES.

REFORESTATION REQUIREMENTS ARE TO BE MET WITH A COMBINATION OF ONSITE FOREST RETENTION (.47 ACRES), ONSITE INDIVIDUAL TREE LANDSCAPING CREDIT (2.95 ACRES) AND OFFSITE FOREST CONSERVATION BANKING (11.312 ACRES).

INDIVIDUAL TREE LANDSCAPING CREDIT CALCULATIONS ARE TO BE PROVIDED WITH THE FINAL FOREST CONSERVATION PLAN, SEE SHEET 2 FOR RECOMMENDED PLANT LIST.

PRELIMINARY FOREST CONSERVATION **PLAN (1 OF 2)**

REVISIONS



WALL
BEL
WAL2001
BENT



DESIGN DRAWN GE JJ/GE CHECKED DATE 8/29/12 SCALE 1*=100' JOB No. 4659-01-002 SHEET OF 2 SHEETS

SUGGESTED PLANT LIST

KEY	BOTANICAL NAME	COMMON NAME	HEIGHT	CALIPER	CONDITION REMARKS
ARGE I	DECIDUOUS TREES			7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-	
AR	ACER RUBRUM	RED MAPLE		2ª CAL. MIN.	888
GT	GLEDITSIA TRIACANTHOS	THORNLESS HONEY LOCUST	ammaynammananan katalaha da sa d	2" CAL. MIN.	8&8
PA	PLANTANUS X ACERIFOLIA	LONDON PLANETREE	<u> </u>	2º CAL. MIN.	8&8
QP	QUERCUS PALUSTRIS	PIN OAK		2" CAL. MIN.	8&8
QH	QUERCUS PHELLOS	WILLOW OAK		2" CAL. MIN.	B&B
QR	QUERCUS RUBRA	RED OAK	and a second	2" CAL. MIN.	6&B
TC	TILIA CORDATA	LITTLELEAF LINDEN		2" CAL, MIN.	8&8
UP	ULMUS PARVIFOLIA	CHINESE ELM		2" CAL. MIN.	8&8
Z\$	ZELKOVA SERRATA	JAPANESE ZELKOVA	1,000,000,000,000,000,000,000,000,000,0	2" CAL, MIN.	B&B
MALL	DECIDUOUS TREES	i i i i i i i i i i i i i i i i i i i 			
AA	AMELANCHIER ARBOREA	SERVICEBERRY	**************************************	2" CAL. MIN.	888
СК	CORNUS KOUSA	KOUSA DOGWOOD	annummuummida s kaksat u es arroa numm	2" CAL MIN.	8&8
CC	CRATAEGUS CRUSGALLI VAR. INERMIS	THORNLESS COCKSPUR HAWTHORN		2" CAL. MIN.	8&8
u	LAGERSTROEMIA INDICA	CRAPE MYRTLE		2" CAL, MIN.	8&8
MS	MALUS 'SNOWDRIFT'	SNOWORIFT CRABAPPLE	~ <u>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</u>	2" CAL. MIN.	B&B
MV	MAGNOLIA VIRGINIANA	SWEETBAY MAGNOUA		2" CAL, MIN.	8&8
			one de la companya d		
ARGE E	VERGREEN TREES		a de la compania del compania del compania de la compania del la compania de la compania della c		
CL	CUPRESSOCYPARIS LEYLANDII	LEYLAND CYPRESS	8'-10' MIN.		B&B
JV	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	8'-10' MIN.	1	8&B
PS	PINUS STROBUS	WHITE PINE	8'-10' MIN.		8&8
TC	TSUGA CANADENSIS	CANADIAN HEMLOCK	8'-10' MIN.	***************************************	888
\$\$400000			West was set to be a		
HRUBS			ti di		
AA	ARONIA ARBUTIFOLIA	RED CHOKEBERRY	24"-30"		CONT.
CA	CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	24°-30"		CONT.
CS	CORNUS STOLONIFERA	REDOSIER DOGWOOD	24"-30"		CONT.
iG	ILEX GLABRA	INKBERRY HOLLY	24"-30"		CONT.
IT	ITEA VIRGINICA	VIRGINIA SWEETSPIRE	24"-30"		CONT.
N	ILEXVERTICILLATA	WINTERSERRY	24"-30"		CONT.
JS	JUNIPERUS CHINENSIS 'PFITZERIANA'	PFITZER JUNIPER	24"-30"		CONT.
KL	KALMIA LATIFOLIA	MOUNTAIN LAUREL	24"-30"		CONT.
MP	MYRICA PENNSYLVANICA	NORTHERN BAYBERRY	24"-30"		CONT.
PL	PRUNUS LAUROCERASUS 'SCHIPKAENSIS'	CHERRY LAUREL	24"-30"		CONT.
RR	ROSA 'RADRAZZ'	KNOCKOUT ROSE	24"-30"		CONT.
VP	VIBURNUM X PRAGENSE	PRAGUE VIBURNUM	24"-30"	<u> </u>	CONT.

Proposition Cartain Commission

TREE CONSERVATION PROCEDURES

PRE-CONSTRUCTION:

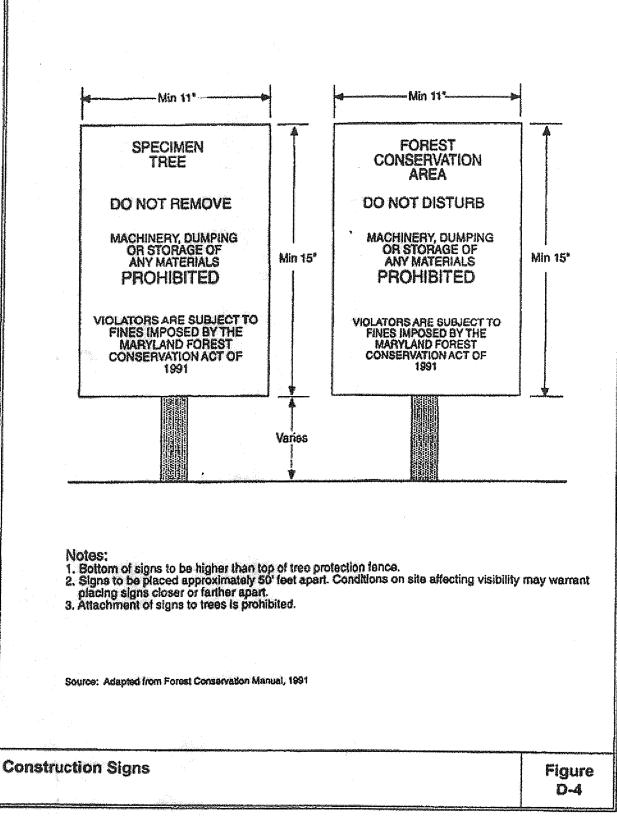
- 1. FOREST RETENTION AREAS THAT ARE TO BE PROTECTED FROM CONSTRUCTION ACTIVITIES SHALL BE IDENTIFIED AT THE CONSTRUCTION SITE.
- 2. PRIOR TO CONSTRUCTION, BLAZE ORANGE PLASTIC MESH TREE PROTECTION FENCE (SEE DETAIL) SHALL BE PLACED ALONG THE LIMITS OF DISTURBANCE AND SHALL BE USED TO PROTECT TREES AND FORESTED AREAS AS SPECIFIED ON THE PLAN.
- 3. AFTER FENCE HAS BEEN INSTALLED, AN 18"-24" ROOT PRUNING TRENCH SHALL BE DUG ALONG THE LIMITS OF DISTURBANCE (SEE DETAIL). ANY LARGE ROOTS (GREATER THAN 1") THAT ARE FOUND WHILE TRENCHING NEAR TREES ARE TO BE CUT BY HAND TO MINIMIZE IMPACT ON TREES TO BE PRESERVED.
- 4. FOREST RETENTION AREA SIGNS (SEE DETAIL) SHALL BE POSTED AT A MAXIMUM 150 FOOT INTERVAL ALONG THE RETENTION EDGE. ATTACHMENT OF SIGNS TO THE TREES IS

CONSTRUCTION:

- 1. TREES AND FORESTED AREAS SHALL BE PROTECTED AND MANAGED BY A LICENSED TREE CARE PROFESSIONAL DURING ALL PHASES OF CONSTRUCTION.
- 2. TREES AND FORESTED AREAS SHALL BE PROTECTED AND MANAGED DURING ALL PHASES OF CONSTRUCTION IN A MANNER THAT WILL ENSURE THAT THESE RESOURCES CONFORM TO POST-DEVELOPMENT TREE AND FORESTED AREA STANDARDS AT THE END OF CONSTRUCTION. THESE STANDARDS REQUIRE THAT TREES SURVIVE CONSTRUCTION IN A MANNER THAT SUBSTANTIALLY RETAINS THEIR PRE-DEVELOPMENT LEVEL OF BIOLOGICAL FUNCTION, HEALTH AND STRUCTURAL CONDITION: AND REQUIRE THAT FORESTED AREAS SURVIVE CONSTRUCTION IN A MANNER THAT PRESERVES THE ECOLOGICAL FUNCTIONALITY HEALTH, AND CONDITION OF SUPER- AND SUB-CANOPY TREE SPECIES; WOODY SHRUBS, HERBACEOUS PLANTS, VINES, NONVASCULAR PLANTS AND EPIPHYTES; DECAYING LEAF LITTER, ROOT MASS, FUNGI, SOIL BIOTA AND SOIL CONDITIONS THAT MAY BE PRESENT.
- 3. IN ADDITION TO PROTECTING TREES, THE PERMITTEE SHALL PROTECT ALL UNDERSTORY PLANTS, LEAF LITTER AND SOIL CONDITIONS FOUND IN FORESTED AREAS DESIGNATED TO BE LEFT PRESERVED EXCEPT AS MAY BE ALLOWED BY THE APPROVED TREE PRESERVATION PLAN AND NARRATIVE.
- 4. THE PERMITTEE SHALL ACTIVELY MONITOR THE CONSTRUCTION SITE TO ENSURE THAT INAPPROPRIATE ACTIVITIES SUCH AS THE STORAGE OF CONSTRUCTION MATERIALS, DUMPING OF CONSTRUCTION DEBRIS. AND TRAFFIC BY CONSTRUCTION EQUIPMENT AND PERSONNEL DO NOT OCCUR WITHIN AREAS SHOWN TO BE PRESERVED OUTSIDE OF THE LIMITS OF CLEARING.
- ANY WORK THAT IS TO OCCUR ADJACENT TO TREES OR WITHIN FORESTED AREAS TO BE PRESERVED, SUCH AS INSTALLATION OF TREE PROTECTION FENCE: REMOVAL OF TRASH OR DEBRIS; OR EXTRACTION OF TREES DESIGNATED TO BE REMOVED IN A MANNER THAT MINIMIZES DAMAGE TO TREES, UNDERSTORY SHRUBS, HERBACEOUS PLANTS, LEAF LITTER, ROOTS SYSTEMS AND SOIL CONDITIONS.
- THE PERMITTEE SHALL RESTORE UNDERSTORY PLANT MATERIALS, LEAF LITTER AND SOIL CONDITIONS TO THE SATISFACTION OF THE COUNTY IF THESE ARE FOUND TO BE DAMAGED, REMOVED OR ALTERED IN A MANNER NOT SPECIFICALLY ALLOWED BY THE PROVISIONS OF THIS CHAPTER OR NOT SPECIFICALLY ADDRESSED WITHIN THE APPROVED TREE PRESERVATION PLAN AND NARRATIVE.
- TREE PROTECTION DEVICES SHALL BE MAINTAINED UNTIL ALL WORK IN THE VICINITY HAS BEEN COMPLETED AND SHALL NOT BE REMOVED OR RELOCATED WITHOUT THE CONSENT OF THE COUNTY. IF THE COUNTY DEEMS THAT THE PROTECTIVE DEVICES ARE INSUFFICIENT. INSTALLATION OF ADDITIONAL PROTECTIVE DEVICES SHALL BE REQUIRED.
- HEAVY EQUIPMENT, VEHICULAR TRAFFIC, STOCKPILING OF MATERIALS OR DEPOSITION OF SEDIMENT SHALL NOT BE PERMITTED WITHIN TREE PRESERVATION AREAS.
- 9. ANY POWER EQUIPMENT USE PRESCRIBED WITHIN TREE PRESERVATION AREAS SHALL BE LIMITED TO SMALL HAND-OPERATED EQUIPMENT SUCH AS CHAINSAWS.
- 10. ANY WORK WITHIN TREE PRESERVATION AREAS REQUIRING THE USE OF LARGER MOTORIZED EQUIPMENT SUCH AS, BUT NOT LIMITED TO, TREE TRANSPLANTING SPADES, SKID LOADERS. TRACTORS, TRUCKS, STUMP-GRINDERS, OR ANY ACCESSORY OR ATTACHMENT CONNECTED TO SUCH EQUIPMENT SHALL NOT OCCUR UNLESS APPROVED IN WRITING BY THE COUNTY. OR UNLESS THE ACTIVITY HAS BEEN SPECIFICALLY ADDRESSED.
- 11. NO TOXIC MATERIALS SHALL BE STORED WITHIN 100 FEET (30.5 METERS) OF VEGETATION
- 12. NO PROTECTIVE DEVICES, SIGNS, UTILITY BOXES OR OTHER OBJECTS SHALL BE NAILED OR AFFIXED TO TREES TO BE PRESERVED.
- 13. IN THE EVENT THAT THE COUNTY DETERMINES THAT A TREE OR PORTION THEREOF IS DEAD, DECLINING, HAZARDOUS, OR A PROPERTY MAINTENANCE BURDEN DUE TO CONSTRUCTION OR ENVIRONMENTAL CHANGES RESULTING FROM CONSTRUCTION; OR, IS HAZARDOUS TO LIFE OR PROPERTY BECAUSE OF CONDITIONS NOT RELATED TO CONSTRUCTION, THE COUNTY SHALL REQUIRE THE PERMITTEE TO REMOVE THE TREE OR PORTION THEREOF. THE PERMITTEE SHALL TAKE SUCH ACTION AS NECESSARY TO ELIMINATE THE TREE OR PORTION THEREOF CAREFULLY. THE PERMITTEE SHALL NOTIFY THE COUNTY OF ANY ACTIONS TAKEN OR PROPOSED TO BE TAKEN UNDER THIS SECTION.
- 14. THE MAIN TRUNKS OF DEAD TREES MAY BE ALLOWED TO REMAIN ON SITES WHERE THE COUNTY DETERMINES THAT A "TRUNK SNAG" MAY PROVIDE HABITAT OR OTHER WILDLIFE BENEFITS AND HAVE LITTLE OR NO POTENTIAL TO CAUSE PERSONAL INJURY OR PROPERTY DAMAGE, OR TO OBSTRUCT STREAMS OR OTHER DRAINAGE.
- 15. WHEN EXCAVATING, TRENCHING, OR TUNNELING, ALL TREE ROOTS GREATER THAN 1 INCH IN DIAMETER THAT ARE EXPOSED AND/OR DAMAGED SHALL BE TRIMMED CLEANLY. AND COVERED WITH ORGANIC MULCH, TOPSOIL, OR OTHER SUITABLE MATERIAL TO PREVENT THE EXPOSED ROOTS FROM DRYING OUT.
- 16. ANY DAMAGE INFLICTED TO THE ABOVE OR BELOW-GROUND PORTIONS OF THE TREES SHOWN TO BE PRESERVED SHALL BE REPAIRED IMMEDIATELY. ALL DAMAGED BRANCHES IN THE CROWN SHALL BE REPAIRED.

POST-CONSTRUCTION:

- 1. THE DEVELOPER SHALL REQUEST AN INSPECTION WHEN CONSTRUCTION IS COMPLETED TO ENSURE THAT ALL WORK IS IN ACCORDANCE WITH THE APPROVED PLANS.
- 2. ALL TREES THAT ARE DEAD OR HAVE BEEN DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITY SHALL BE REMOVED OR REPAIRED.



D - 5

Limits of clearing

← Tree protection fence

maximum

trench width

trench

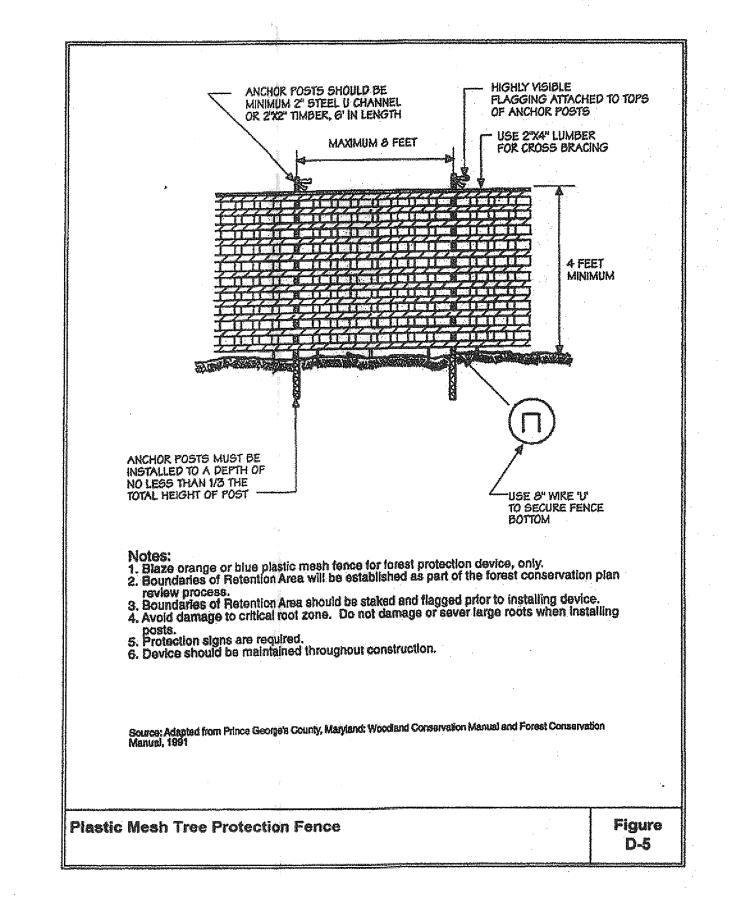
depth

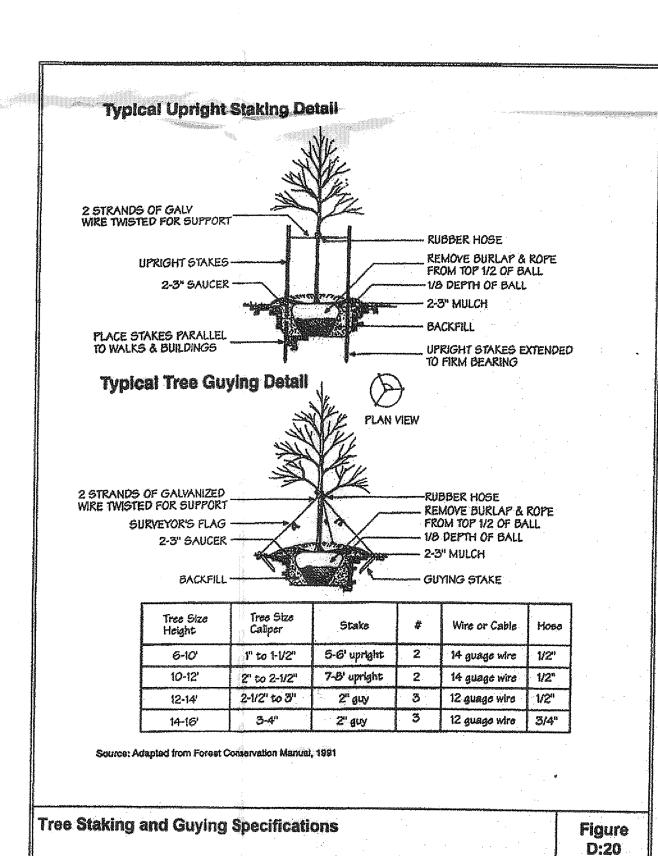
PLATE NO. STD. NO.

← Silt fence

Woodchip mulch

ROOT PRUNING





D - 21

PRELIMINARY FOREST CONSERVATION **PLAN (2 OF 2)**

REVISIONS





CHECKED SHEET OF 2 SHEETS